

## **In-place Preservation of File System Objects During a Disk Clone Operation**

### **ABSTRACT OF THE DISCLOSURE**

A cloning manager preserves in-place file system objects  
5 (103) during a clone operation. The cloning manager (101)  
determines boundaries (105) of a file system (107) to be created  
by the clone operation, and identifies at least one protected  
area (113) within the boundaries (105), reserved for the file  
system (107). The cloning manager (101) also identifies at  
10 least one in-place file system object (103) within or  
overlapping the boundaries (105) to be preserved during the  
clone operation. The cloning manager (101) ensures that each  
object (103) to be preserved is not located in a protected area  
(113), shifting (203) the objects (103) as necessary. The  
15 cloning manager (101) creates the file system (107) during the  
clone operation only in locations that do not contain objects  
(103) to be preserved.